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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,052	05/06/2004	Harry C. Morris	DMBC-0007	6640

7590

06/20/2006

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EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/840,052

Applicant(s)

MORRIS, HARRY C.

Examiner

John J. Zimmerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FOURTH OFFICE ACTION

Amendments

1. This Fourth Office Action is in response to the "Reply under 37 C.F.R. 1.111" received April 21, 2006. Claims 3-5 and 8-10 are pending in this application.

Claim Objections

2. Claim 8 is objected to because of the following informalities: The spelling of "increased" (claim 8, line 14) should be corrected.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindblad (U.S. Patent 4,970,560).

5. Lindblad discloses plating a carbon steel blade with nickel-phosphorus of a thickness of about 5 microns and then heat treating to increase hardness of the coating to a hardness of 68-70 Rc (e.g. column 4, lines 33-49). The use of beveled blades (e.g. column 2, line 53) and square blades (e.g. see Figure 2) are shown by Lindblad to be obvious alternative in the art depending on the particular use of the blade. Lindblad may differ from the claims in that Lindblad may not require a Rockwell C hardness of "greater than 70" (e.g. claim 10, lines 8-9; claim 8, line 8), but the difference between Lindblad's hardness of 70 Rc and applicant's claimed "greater than 70" Rc is so minor that *prima facie* one of ordinary skill in the art would expect the coated blades to essentially be the same. In addition, although Lindblad may not disclose that the "durability, smoothness, gloss and erosion are increased, run time for the coater or doctor blade is increased to three to four times greater than that of Blue Polished 1095 Steel, and streaking and coefficient of friction of the coater or doctor blade are decreased" (e.g. see independent claim 8; see similar language in independent claim 10), it appears that these features are simply a product of increasing the hardness of a blade to at least RC 70 (e.g. see page 5 of the specification) and therefore, these features would appear to be inherent to blades which possess a hardness of at least RC 70 (i.e. the blades of the applied prior art). Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on *prima facie* obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this

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rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). There is no patentable distinction between the blades of Linblad and the blades claimed by applicant. Regarding the limitation "consisting of" in claim 10, the blade of Linblad (before the application of the fluorocarbon material) is a tangible intermediate article and thus reads on the claims. Regarding claim 3's recitation of "electroless" nickel, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blade of Lindblad is certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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6. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindblad (U.S. Patent 4,970,560) as applied to claims 3-5, 8 and 10 above, and further in view of Calnan (U.S. Patent 3,490,314).

7. Lindblad may differ from claim 9 in that Lindblad's nickel-phosphorus coating may be electrodeposited (e.g. see column 4, lines 33-36). Calnan, however, clearly discloses that hard nickel-phosphorus coatings on blades can be deposited either electrolytically or electrolessly (e.g. column 2, lines 19-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use either electroplating or electroless plating to apply the nickel-phosphorus coatings to the blades of Lindblad because Calnan shows that either process can be used.

8. Claims 3-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calnan (U.S. Patent 3,490,314).

9. Calnan discloses plating a low carbon steel blade or stainless steel blade (e.g. column 2, lines 5-11) with nickel-phosphorus of a thickness of up to 0.005 inch (e.g. see column 2, lines 65-69) and then heat treating to increase hardness of the coating (e.g. column 3, lines 4-15). The use of beveled blades is disclosed (e.g. honing - column 3, lines 16-19), but the examiner notes that square edge blades are also typically used in the art. Calnan may differ from the claims in that Calnan may not disclose the Rockwell C hardness of the nickel-phosphorus layer after heat treating, but Calnan does disclose that heat treating can be done to maximum hardness (e.g.

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column 3, lines 4-15). In view of the fact that Calnan heat treats his nickel-phosphorus coatings to maximum hardness, and applicant uses the same coating composition, it must be assumed that the hardness results would be the same as applicant's results. Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. 102 or on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blades of Calnan are certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or

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structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Response to Arguments

10. Applicant's arguments filed April 21, 2006 have been fully considered but they are not persuasive with regards to the pending rejections.

11. In an effort to expedite prosecution, applicant has amended the independent claims to recite that the "durability, smoothness, gloss and erosion are increased, run time for the coater or doctor blade is increased to three to four times greater than that of Blue Polished 1095 Steel, and streaking and coefficient of friction of the coater or doctor blade are decreased" (e.g. see independent claim 8; see similar language in independent claim 10). A review of applicant's specification, however, shows that these features are simply a product of increasing the hardness of a blade to at least RC 70 (e.g. see page 5 of the specification) and therefore, these features would appear to be inherent to blades which possess a hardness of at least RC 70 (i.e. the blades of the applied prior art). Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton*,

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and Shaw, 195 USPQ 431 (CCPA 1977). It is not necessary that the prior art disclose properties that would be inherent to the compositions. Discovery of a new property or use of previously known composition, even if unobvious from the prior art, cannot impart patentability to claims to known composition, *In re Spada*, 15 USPQ2d 1655 (Court of Appeals, Federal Circuit 1990).

“[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art’s functioning, does not render the old composition patentably new to the discoverer.” *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court stated that “just as the discovery of properties of a known material does not make it novel, the identification and characterization of a prior art material also does not make it novel.” There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003); see also *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320, 69 USPQ2d 1584, 1590 (Fed. Cir. 2004)(“[T]he fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention.”); *Abbott Labs v. Geneva Pharms., Inc.*, 182 F.3d 1315, 1319, 51 USPQ2d 1307, 1310 (Fed.Cir.1999); *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1348-49 (Fed. Cir. 1999). See MPEP 2112.

12. Regarding the limitation "consisting of" in claim 10, the intermediate blade of Linblad *before* the application of the fluorocarbon material is a tangible intermediate product and thus reads on the claims. Tangible intermediate products are actual physical articles and therefore may be used to reject the claims. See *Ex parte Brinton*, 82 U.S.P.Q. 112 (BdPatApp&Int, 1949).

13. Regarding the limitation "a blade-shaped substrate base with a front side and a reverse side and angled edges on the front side and the reverse side" (e.g. see claim 10, lines 4-5) and "at least an angled edge of a front side" (e.g. claim 8, line 6), an edge formed with a right angle is still considered an "angled" edge. A right angle is an angle.

Conclusion

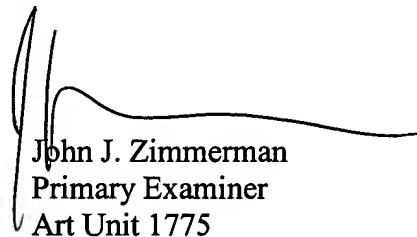
14. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Applicant has amended the pending claims to delete packaging the blades in coiled rolls and therefore the pending rejections have been modified to omit Mahoney (U.S. Patent 3,810,58) which had been applied to show the obviousness of this feature. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
June 19, 2006